class group so that said report system class group and said business logic system class group can start and terminate their processing on the basis of the data inputted through the screen provided by the screen system class group.

By the present amendment, Applicants propose to amend claims 1,7,11 and 13 to more appropriately claim the innovation.

REMARKS

In the Final Office Action dated January 25, 2002, the Examiner rejected claims 1-14 under 35 U.S.C. §103(a) as being unpatentable over *The San Francisco Project* in view of *Lau* (U.S. Patent 5,987,247).

At stated by the Examiner, *The San Francisco Project* discloses a "base" infrastructure relating to the core class group as set forth in claim 1 (see page 420, 1st paragraph). In addition, *The San Francisco Project* discloses a "financials" business process (business financials/accounts/ledger) relating to the report system class group as set forth in claim 1 (see the figure on page 418, and 2nd col., 3rd paragraph). Regarding the business logic system class group as set forth in claim 1, we would like to point out that the "logistics" in the figure of page 418 of *The San Francisco Project* merely represents another application domain different from the "financials," although the Examiner asserts that the "logistics" corresponds to the business logic system class group. However, the concrete structure of the report system class group and the business logic system class group is not clearly disclosed.

With regards to *The San Francisco Project*, although it discloses that the "financials" business process is built on the basis of the "base" infrastructure, it does not

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disclose any structure of the framework as set forth in claim 1, in which the screen system class group (12), the report system class group (13) and the business logic system class group (14) respectively inherit the system core class group (11) and are related to each other through the system core class group (11) so that the report system class group (13) and the business logic system class group (14) can start and terminate their processing on the basis of the data inputted through the screen provided in the screen system class group (12).

We would like to emphasize that *The San Francisco Project* is, in the first place, directed to the development of the non-GUI business application frameworks, as stated in page 421, 2nd col., last paragraph in *The San Francisco Project*. Namely, the basic design strategy in the framework of *The San Francisco Project* is to separate the business logic function and the report function from the user interface; and this means that the aim or technical concept of the framework of *The San Francisco Project* is essentially different from the framework as set forth in claim 1, which is in turn meant to build business application systems with special purposes, such as an order management system, an electronic medical sheet system and a customer management system, in which various processing (e.g., registration management, statistical operation, added-up operation, and calculation of charges) are given to various data inputted through the screen so that the results can be outputted as a report (e.g., a slip, a medical sheet and a list of customers).

Incidentally, although the Examiner has asserted that "it (*The San Francisco Project*) does suggest a motivation to combine such feature mentioning application updates to include this feature, see pg 416, 2nd paragraph," *The San Francisco Project*

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does not teach nor suggest that the framework itself includes any special structure for a screen system function.

Lau discloses a screen system in a business framework (see fig. 2, item #209), as pointed out by the Examiner.

However, the structure disclosed in fig. 2 of *Lau* corresponds to the structure of the business application system; and it does not disclose any structure of the framework for constructing the business application system, nor does it disclose any structure of the framework as set forth in claim 1, in which the screen system class group (12), the report system class group (13) and the business logic system class group (14 respectively inherit the system core class group (11) and are related to each other through the system core class group (11) so that the report system class group (13) and the business logic system class group (14) can start and terminate their processing on the basis of the data inputted through the screen provided by the screen system class group (12). Therefore claim 1 is patentable over *The San Francisco Project* in view of Lau. Applicants respectfully request that the rejection of claim 21 under 35 U.S. C. 103(a) be withdrawn and that claim 1 be allowed.

Claim 2 depends on independent claim 1 and includes all the limitations of claim 1. Furthermore, *The San Francisco Project* and *Lau* fail to disclose the features set forth in claim 2. Although *The San Francisco Project* discloses a plurality of common components, it fails to disclose the following features: the common component group (20), which is provided independently from the abstract class group (10) (that has abstractly defined a basic structure and behavior of the business application system), has an interface with the above-mentioned abstract class group (10). Therefore,

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Applicants respectfully request the Examiner withdraw the rejection of claim 2 in view of the arguments above, and by virtue of its dependency upon claim 1.

Claims 3-6 depend on independent claim 1, respectively, and include all the limitations of claim 1. Therefore, Applicants respectfully request the Examiner withdraw the rejection of claims 3-6 in view of the arguments above, and by virtue of its dependency upon claim 1. Applicants also request the Examiner withdraw the rejection of claim 7, since the arguments in claim 1 are similarly applicable to claim 7. Claim 8 depends on independent claim 7 and includes all the limitations of claim 7. Therefore, Applicants respectfully request the Examiner withdraw the rejection of claim 8 in the view of the arguments above, and by virtue of its dependency upon claim 7. Claims 9 and 10 depend on independent claim 7, respectively, and include all the limitations of claim 7. Therefore, Applicants respectfully request the Examiner withdraw the rejection of claims 9 and 10 in the view of the arguments above, and by virtue of its dependency upon claim 7. Applicants also request the Examiner withdraw the rejection of claims 11 and 13, since the arguments in claim 1 are similarly applicable to claims 11 and 13. Claims 12 and 14 depend on independent claims 11 and 13, respectively, and include all the limitations of their respective claims. Therefore, Applicants respectfully request the Examiner withdraw the rejection of claims 12 and 14 in the view of the arguments above, and by virtue of their dependency upon claims 11 and 13.

In view of the foregoing remarks, Applicants respectfully request the reconsideration and reexamination of this application and the timely allowance of the pending claims.

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Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: May 28, 2002

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APPENDIX

1. (Twice Amended) A method for constructing a business application system by using a framework described by an object-oriented language, the method comprising the steps of:

preparing an abstract class group including (i) a system core class group, which has abstractly defined a basic structure and behavior of a business application system that includes a screen system function for inputting data through a screen, a report system function for printing a report on the basis of the date inputted by the screen system function, a business logic system function for executing at least calculation or aggregation on the basis of the data inputted by the screen system function, and (ii) a screen system class group, a report system class group and a business logic system class group, which respectively inherit said system core class group, wherein said three system class groups are related to each other through said system core class group so that said report system class group and said business logic system class group can start and terminate their processing on the basis of the data inputted through the screen provided by the screen system class group;

inheriting said screen system class group, said report system class group and said business logic system class group of said abstract class group to prepare a screen system functional group, a report system functional group and a business logic system functional group;

inheriting said system core class group of said abstract class group to prepare a system core functional group; and

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integrating said screen system functional group, said report system functional group, said business logic system functional group and said system core functional group.

7. (Twice Amended) A computer-readable storage medium having stored a framework for a business application system, which has been described by an object-oriented language, said framework including:

an abstract class group which has abstractly defined a structure and behavior of a business application system that includes a screen system function for inputting data through a screen, a report system function for printing a report on the basis of the data inputted by the screen system function, a business logic system function for executing at least calculation or aggregation on the basis of the data inputted by the screen system function,

said abstract class group including (i) a system core class group, which has abstractly defined a basic structure and behavior of said business application system, and (ii) a screen system class group, a report system class group and a business logic system class group, which respectively inherit said system core class group, wherein said three system class groups are related to each other through said system core class group so that said report system class group and said business logic system class group can start and terminate their processing on the basis of the data inputted through the screen provided by the screen system class group.

11. (Twice Amended) A computer-readable storage medium having stored a framework for a business application system, which includes a plurality of class groups which are described by an object-oriented language [and which are capable of

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manipulating data uniformly produced from each of said class groups], said framework including:

a system core class group having defined [the] manipulation of data in a business application system that includes a screen system function for inputting data through a screen, a report system function for printing a report on the basis of the data inputted by the screen system function, a business logic system function for executing at least calculation or aggregation on the basis of the data inputted by the screen system function; and

a screen system class group, a report system class group and a business logic system class group inheriting said system class group;

wherein said screen system class group, said report system class group and said business logic system class group are related to each other through said system core class group so that said report system class group and said business logic system class group can start and terminate their processing on the basis of the data inputted through the screen provided by the screen system class group.

13. (Twice Amended) A computer-readable storage medium having stored a framework for a business application system, which includes a plurality of class groups which are described by an object-oriented language [and which are capable of transmitting and receiving a request between functions produced from each of said class groups], said framework including:

a system core class group having defined [the] transmission and receiving of a request between functions in a business application system that includes a screen system function for inputting data through a screen, a report system function for printing

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a report on the basis of the data inputted by the screen system function, a business logic system function for executing at least calculation or aggregation on the basis of the data inputted by the screen system function; and

a screen system class group, a report system class group and a business logic class group inheriting said system class group;

wherein said screen system class group, said report system class group and said business logic system class group are related to each other through said system core class group so that said report system class group and said business logic system class group can start and terminate their processing on the basis of the data inputted through the screen provided by the screen system class group.

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